Science setback for Texas schools

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After three all-day meetings and a blizzard of amendments and counter-amendments, the Texas Board of Education cast its final vote Friday on state science standards. The results weren't pretty.

The board majority amended the Earth and Space Science, and Biology standards (TEKS) with loopholes and language that make it even easier for creationists to attack science textbooks.

"The final vote was a triumph of ideology and politics over science," says Dr. Eugenie Scott, Executive Director of the National Center for Science Education (NCSE). "The board majority chose to satisfy creationist constituents and ignore the expertise of highly qualified Texas scientists and scientists across the country." NCSE presented the board with a petition from 54 scientific and educational societies, urging the board to reject language that misrepresents or undermines the teaching of evolution, which the board likewise ignored.

Although the "strengths and weaknesses" wording that has been part of the standards for over a decade was finally excised--wording that has been used to pressure science textbook publishers to include creationist arguments--a number of amendments put the creationist-inspired wording back in.

"What we now have is Son of Strengths and Weaknesses," says Josh Rosenau, a project director for NCSE. "Having students 'analyze and evaluate all sides of scientific evidence' is code that gives creationists a green light to attack biology textbooks."

For example, the revised biology standard (7B) reflects two discredited creationist ideas--that "sudden appearance" and "stasis" in the fossil record somehow disprove evolution. The new standard directs students to "analyze and evaluate the sufficiency of scientific explanations concerning any data of sudden appearance, stasis and the sequential nature of groups in the fossil records." Other new standards include language such as "is thought to", or "proposed transitional fossils" to make evolutionary concepts seem tentative when, in fact, such concepts are well-documented and accepted by the scientific community.

The changes will not immediately affect curricula in Texas high schools, but "the standards will affect standardized tests and textbooks," says Rosenau. Thanks to such laws as No Child Left Behind, ubiquitous standardized tests are central to measuring student progress and proficiency. Teachers teach to the test, notes Rosenau, and textbooks have to reflect this.

"Will publishers cave in to pressure from the Texas board to include junk science in their textbooks? It has happened before," says Scott. "But textbooks that please the Texas board will be rejected in other states. Publishers will have to choose between junk science and real science."

"Let's be clear about this," cautioned Dr. Scott. "This is a setback for science education in Texas, not a draw, not a victory. The revised wording opens the door to creationism in the classroom and in the textbooks. The decisions will not only affect Texas students for the next ten years, but could result in watered-down science textbooks across the U.S. There's a reason creationists are claiming victory."

NCSE's Josh Rosenau summed up the frustration of scientists and educators alike: "This is a hell of a way to make education policy."

Source: American Institute of Physics